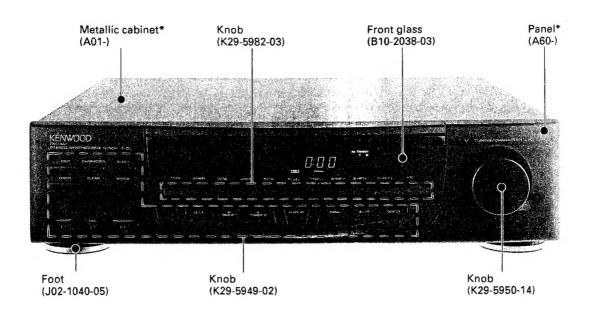
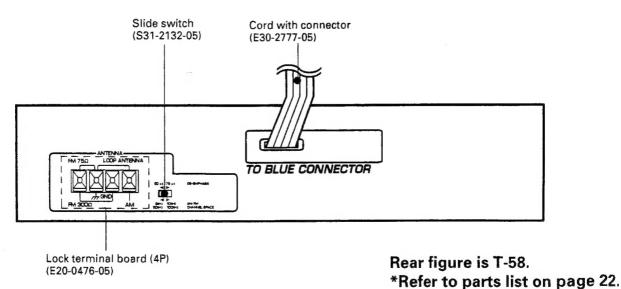
FM/AM STEREO SYNTHESIZER TUNER

T-58/L SERVICE MANUAL

KENWOOD

© 1994-8 PRINTED IN KOREA B51-4911-00 (K) 2651





PRECAUTIONS FOR REPAIR

- T-58, T-58L don't have a power supply transformer. Use A-58, A-68 or RM-90PS, PS-93UA power supply to supply power, if neither is available, adjust to operate as instructed on page 9.
- When turning the power on, short the Check land (KR5 and KS0) (X05-, B/3).

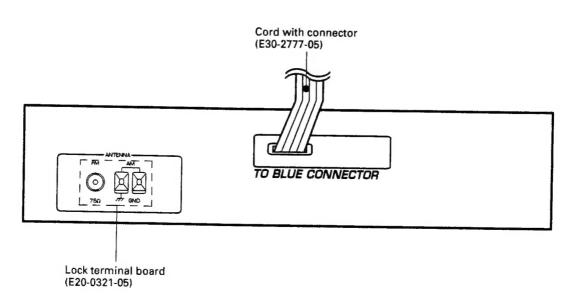
T-58/L

CONTENTS

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EXTERNAL VIEW: T-58L (Rear panel)



ACCESSORIES

System configuration

System name	AMP / GE	TUNER	CD/LD PLAYER	CASSETTE DECK	Speakers
MIDI M-58	A-58	T-58L	DP-58	X-58	LS-58
MIDI M-58M	A-58	T-58L	DP-M58	X-58	LS-58
MIDI M-767	A-58	T-58	DP-58	X-58	S-58
MIDI M-868M	A-58	T-58	DP-M58	X-58	S-58
MIDI M-969LD	A-68	T-58	LVD-68	X-58	S-68

· MIDI M-58, M-58M, M-767, M-868M :

Speaker cords are packed with the Speakers. All other accessories are packed with the Amp/GE unit.

· MIDI M-969LD

Speaker cords are packed with the Speakers. Remote control unit and batteries are packed with the CD/LD player unit. All other accessories are packed with the Amp/GE unit.

• FM indoor antenna	******************
(T90-0182-15)	



• AM loop antenna ass'y - — — — (T90-0195-05)



Loop antenna stand (J19-3645-05)





Except for U.K., Europe and Australia. For the unit with a European AC plug in areas other than Europe.





For U.K. and Europe.

For U.K. and Europe.

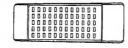
Audio cord1
 (E30-0505-05) M-969LD only











Battery cover (A09-0106-08)

 Remote control unit (RC-68LD) 1 (X94-1050-71) M-969LD only

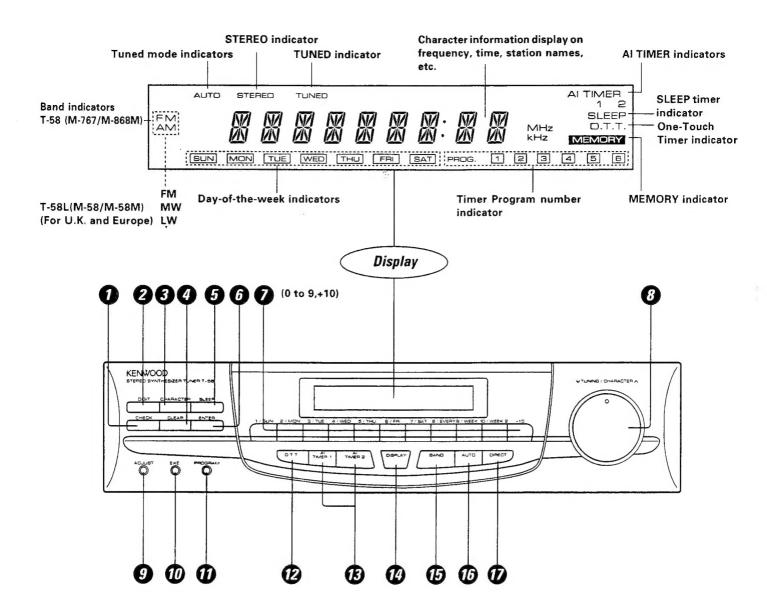


Battery cover (F07-0721-33)

• Batteries2



CONTROL



O CHECK key

Press for calendar checking.

@ DIGIT key

Press when presetting a radio station name.

OCHARACTER key

Press when presetting a radio station name.

OCLEAR key

Press to cancel the program timer.

GSLEEP key

Press to activate the sleep timer.

GENTER key

Press when adjusting the clock time, setting the timer or presetting a radio station name.

Numeric/day-of-the-week keys

Press when selecting the radio station to be received or setting the program timer.

TUNING/CHARACTER knob

Rotate when selecting the radio station to be received or when presetting a radio station name.

O ADJUST key

Press when adjusting the clock time.

ØEXE. key

Press to execute a timer program.

OPROGRAM key

Press when setting the program timer.

@O.T.T. (One-Touch Timer) key

Press for one-touch timer playback.

3 Al TIMER 1/2 keys

Press for Al timer operation.

@DISPLAY key

Press to change the display contents.

BAND kev

Press to select the frequency band (FM/AM) to be received.

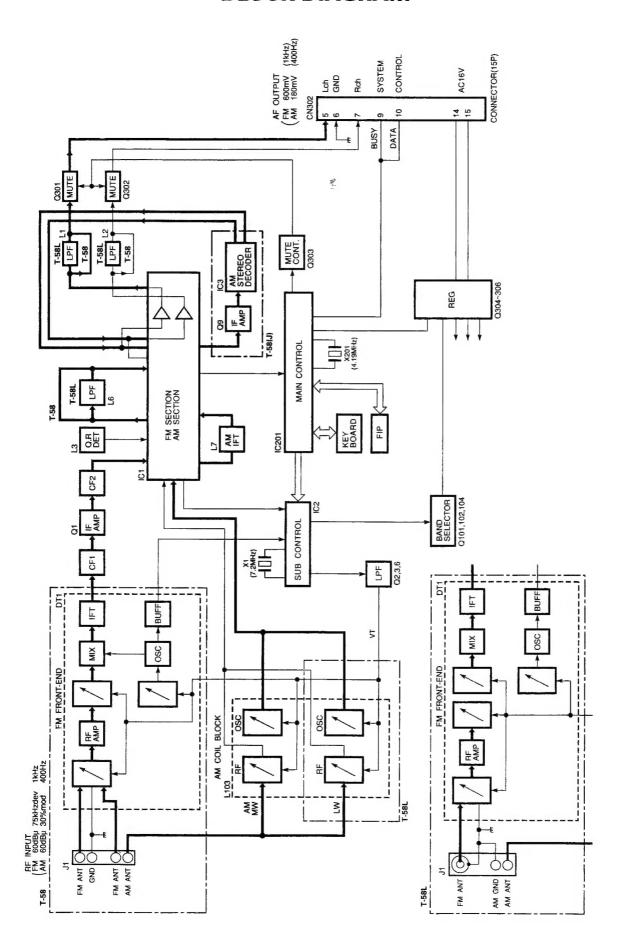
@ AUTO key

Press to select the auto tuning mode or to switch over the audio .

O DIRECT key

Press when receiving a radio station using numeric keys.

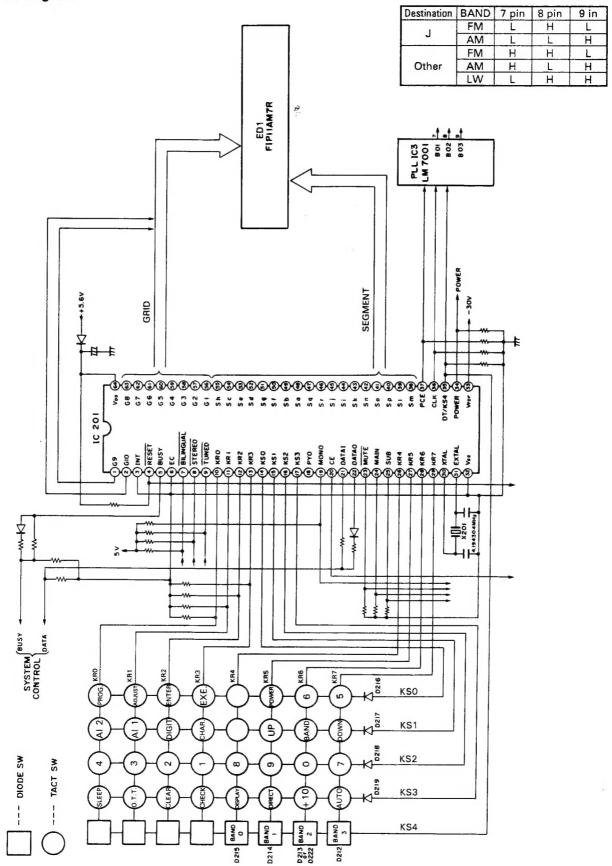
BLOCK DIAGRAM



CIRCUIT DESCRIPTION

1. Surround μ-com : CXP50216-107S (IC201)

1-1. Block diagram



CIRCUIT DESCRIPTION

1-2. Pin function

No.	Name	1/0	Function
1, 2	G9, G10	0	FL grid output.
3	INT	-	Not used. (GND)
4	RESET	I	Reset input. ("H": Normal, "L": RESET)
5	BUSY	1/0	System control BUSY input/output
6	EC	-	Not used. (GND)
7	BIL	1	BILINGUAL. ("H" : Normal, "L" : BILINGUAL)
8	STEREO	ı	Stereo signal input. ("H" : MONO, "L" : STEREO)
9	TUNED	I	Tuning signal input. ("H" : ÑO, "L" : TUNED)
10~13	KR0~KR3	1	Key return input. ("H": ON, "L": OFF)
14~17	KS0~KS3	0	Key scan output. ("H" : ON, "L" : OFF)
18	PY0		Not used. (Open)
19	MONO	0	Forced MONO output. ("H": MONO, "L": STEREO)
20	CE	1	AC OFF detection input. ("H" : AC ON, "L" : AC OFF)
21	DATAI	1	System control DATA input.
22	DATAO	0	System control DATA output.
23	MUTE	0	Line mute. ("H" : MUTE OFF, "L" : MUTE ON)
24	MAIN	-	Not used.
25	SUB	_	Not used.
26~29	KR4~KR7	1	Key return input. ("H": ON, "L": OFF)
30	XTAL	-	Quartz oscillator 4.194304MHz.
31	EXTAL	-	Quartz oscillator 4.194304MHz.
32	Vss	-	GND pin.
33	VFDP	-	-30V.
34	POWER	0	POWER ON/OFF control. ("H": ON, "L": OFF)
35	DT/KS4	0	PLL DATA output. (Key scan output for destination switch)
36	CLK	0	PLL CLOCK output.
37	PCE	0	PLL CE output.
38~55	Sm~Sh	0	FL segment output. (m, I, p, o, n, k, i, j, r, q, a, b, f, g, d, e, c, h)
56~63	G1~G8	0	FL glid output.
64	VDD	-	+5V (Power supply).

CIRCUIT DESCRIPTION

2. Test mode

Method of setting

While turning the TUNING/CHARACTER knob to counterclockwise, turn AC ON.

Contents

POWER ON

FLL all lit

Test frequency setting. (Table 1)

Method of cancelling

Clearing the FL all lit state is performed by numeral key, BAND key, TUNING/CHARACTER knob.

Initial status setting (Reset)

1. Method

While pressing the ENTER key, turn AC ON.

2. Contents

The all memory is cleared and the initial status is fully restored. At this time, however, test frequency is newly memorized in the preset memory. (Table 1)

Table 1

Destination	T-	58	T-58L
Preset channel	J type	Y, M, X type	T, E, G type
01 ch	FM 76.0 MHz	FM 98.0 MHz	FM 98.0 MHz
02 ch	FM 78.0 MHz	FM 108.0 MHz	FM 108.0 MHz
03 ch	FM 83.5 MHz	AM 630 kHz	AM 630 kHz
04 ch	FM 88.0 MHz	AM 990 kHz	AM 990 kHz
05 ch	FM 90.0 MHz	AM 1440 kHz	AM 1440 kHz
06 ch	AM 531 kHz	AM 1602 kHz	7 (V) 1440 KHZ
00 01	AM 630 kHz	(AM 1610 kHz)	AM 1602 kHz
07 ch	AM 990 kHz	FM 87.5 MHz	LW 162 kHz
08 ch	AM 1440 kHz	FM 87.5 MHz	LW 216 kHz
09 ch	AM 1602 kHz	FM 87.5 MHz	LW 270 kHz
10 ch	FM 76.0 MHz	FM 89.1 MHz	FM 89.1 MHz
11 ch	FM 76.0 MHz	FM 87.5 MHz	LW 281 kHz
12 ch	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz
13 ch	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz
14 ch	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz
15 ch	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz
16 ch	AM 990 kHz	FM 87.5 MHz	FM 87.5 MHz
17 ch	FM 89.1 MHz	FM 87.5 MHz	
18 ch	FM 76.0 MHz	FM 87.5 MHz	
19 ch	FM 76.0 MHz	FM 87.5 MHz	
20~30 ch	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz FM 87.5 MHz

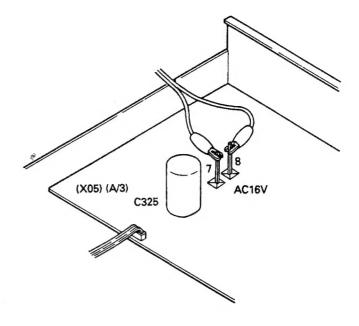
Conditions by destination

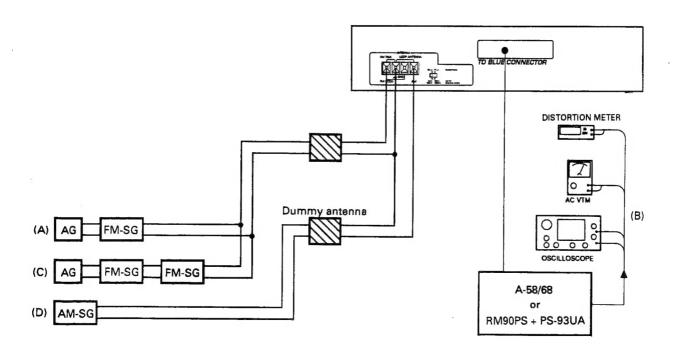
Tune		Swit	ches			Receiving	Inter-channel	Inter-mediate	PLL reference
Туре	В3	B2	B1	BO	Band	frequency range	space	frequency	frequency
T-58 : J	0	0	0	0	FM	76.0~90.0 MHz	100 kHz	-10.75MHz	25 kHz
					AM	531~1602 kHz	9kHz	+450 kHz	9 kHz
					FM	87.5~108.0MHz	100kHz or 50kHz	+10.7MHz	50kHz
T-58 : M, Y	1	1 or 0	1	0	АМ	531~1602 kHz or 530~1610kHz	9 kHz or 10kHz	+450 kHz	10kHz
Г-58 : К. Р	1	0	0	0	FM	87.5~108.0MHz	100 kHz	+10.7MHz	50 kHz
					AM	530~1700 kHz	10kHz	+450 kHz	10kHz
Г-58 : Х	1	1 1	0	0	FM	87.5~108.0MHz	50 kHz	+10.7MHz	50 kHz
					AM	531~1602 kHz	9kHz	+450 kHz	9 kHz
					FM	87.5~108.0MHz	50 kHz	+10.7MHz	50 kHz
Γ-58L : T, E, G	1	1	0	1	MW	531~1602 kHz	9kHz	+450 kHz	9 kHz
					LW	153~281 kHz	1 kHz	+450 kHz	1 kHz

ADJUSTMENT

The T-58 and T-58L don't have a power transformer. Use A-58/68 or RM-90PS, PS-93UA to supply power to the T-58/58L. If neither is available, apply AC 16V to pin 7 and pin 8 of the tuner unit (X05-, A/3).

When turning the power on, short the Check land (KR5 and KS0) (X05-, B/3).





T-58/L

ADJUSTMENT/AJUSTES

ENGLISH

		INPUT	OUTPUT	TUNER	ALIGNMENT		
No.	ITEM	SETTINGS	SETTINGS	SETTINGS	POINTS	ALIGN FOR	FIG.
FM S	ECTION	SELECTOR	: FM		,		
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, ±75kHz dev.(M,X,Y type) 1kHz, ±40kHz dev.(E,T type) 60dBµ(ANT input)	Connect a DC voltmeter between TP9 and TP10. (X05-)	AUTO or MONO 98.0MHz	L3 (X05-)	0V	
2	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ±67.5kHz dev. Pilot: ±7.5kHz dev. (M,X,Y type) 1kHz, ±40kHz dev. Pilot: ±6kHz dev. (E,T type) 60dBµ(ANT input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion.	
3	SEPARATION (E,T type only)	(C) 98.0MHz 1kHz, ±40kHz dev. Pilot: ±6kHz dev. Selector: L or R 60dBµ(ANT input)	(B)	AUTO 98.0MHz	VR1 (X05-)	Minimum crosstalk	

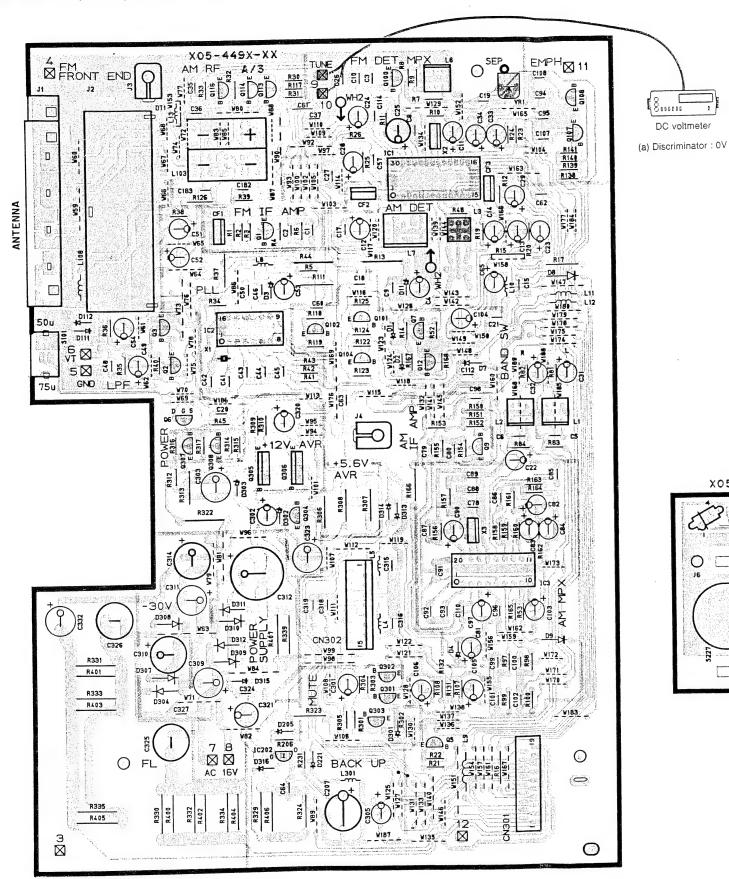
ESPANÕL

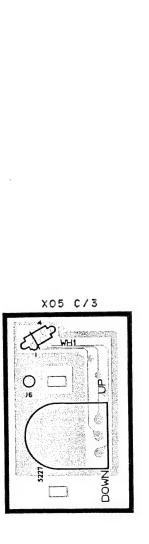
	6 ———	AJUSTES	AJUSTES DE SALIDA	AJUSTES DEL SINTONIZADOR	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
Núm.	ÍTEM	DE ENTRADA		SHITOHIEADON	ALITERATION	712111211121111111111111111111111111111	
SECC	IÓN DE FM	SELECTOR	R; FM				
1	DISCRIMINADOR	(A) 98.0MHz 1kHz, ±75kHz dev.(M,X,Y type) 1kHz, ±40kHz dev.(E,T type) 60dBµ(Entrada de antena)	Conecte un voltímetro de CC entre TP9 y TP10. (X05-)	AUTO or MONO 98.0MHz	L3 (X05-)	OV	
2	distorsión (Estéreo)	(C) 98.0MHz 1kHz, ±67.5kHz dev. Pilot: ±7.5kHz dev. (M,X,Y type) 1kHz, ±40kHz dev. Pilot: ±6kHz dev. (E,T type) 60dBµ(Entrada de antena)	(B)	AUTO 98.0MHz	1FT (W02-)	Distorsión mínima.	
3	SEPARACIÓN (E,T type only)	C) 98.0MHz 1kHz, ±40kHz dev. Pilot : ±6kHz dev. Selector : L or R 60dBµ(Entrada de antena)	(B)	AUTO 98.0MHz	VR1 (X05-)	Diafonía mínima.	

PC BOARD (COMPONENT SIDE VIEW)

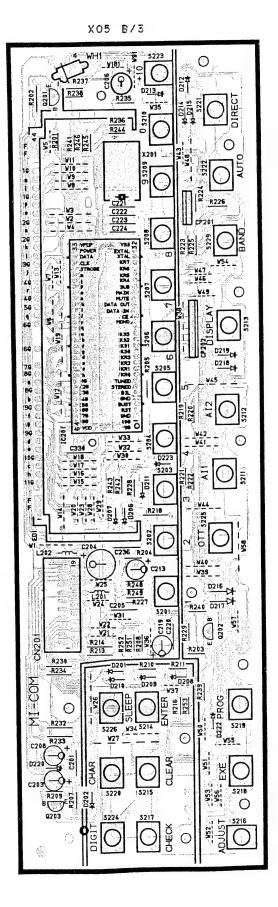
JAPAN MADE : X05-449X-XX (0-02 : J, 0-22 : Y \cdot M, 0-72 : X, 2-71 : E \cdot T \cdot G) SINGAPORE MADE: X05-449X-XX (0-01: J, 0-21: Y · M, 0-71: X, 2-70: E · T · G)

MALAYSIA MADE : X05-449X-XX (0-21 : I, 2-70 : E · T · G)





DC voltmeter

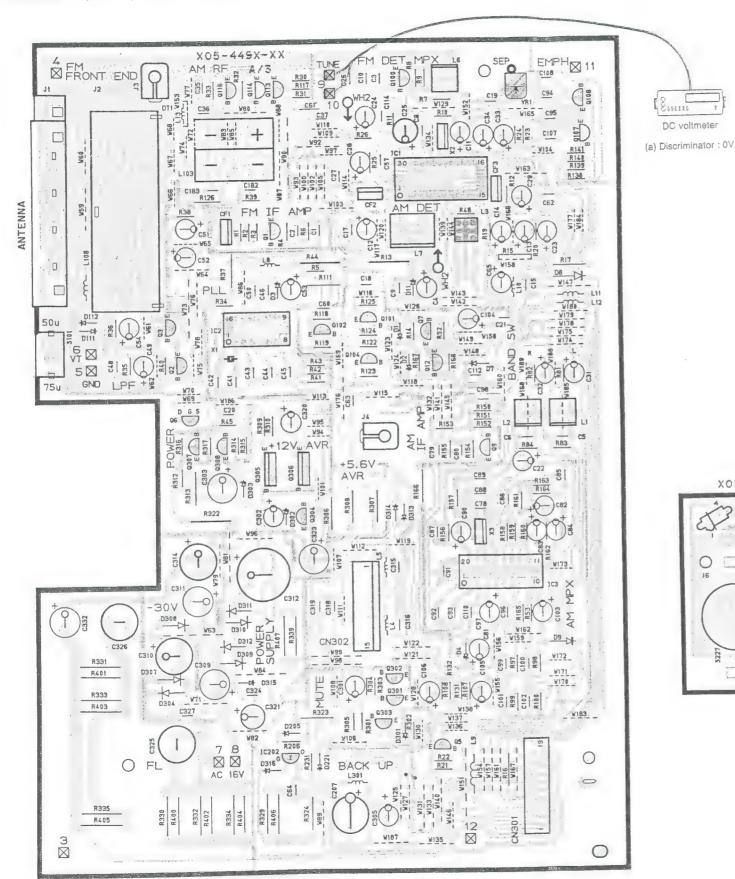


Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (COMPONENT SIDE VIEW)

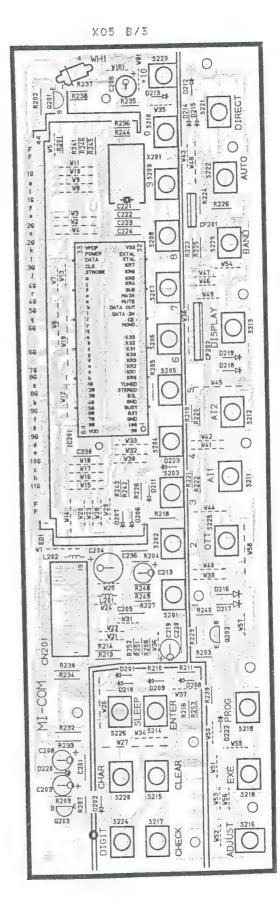
JAPAN MADE : X05-449X-XX (0-02 : J, 0-22 : Y \cdot M, 0-72 : X, 2-71 : E \cdot T \cdot G) SINGAPORE MADE : X05-449X-XX (0-01 : J, 0-21 : Y · M, 0-71 : X, 2-70 : E · T · G)

MALAYSIA MADE: X05-449X-XX (0-21: I, 2-70: E · T · G)





DC voltmeter



Refer to the schematic diagram for the values of resistors and capacitors.

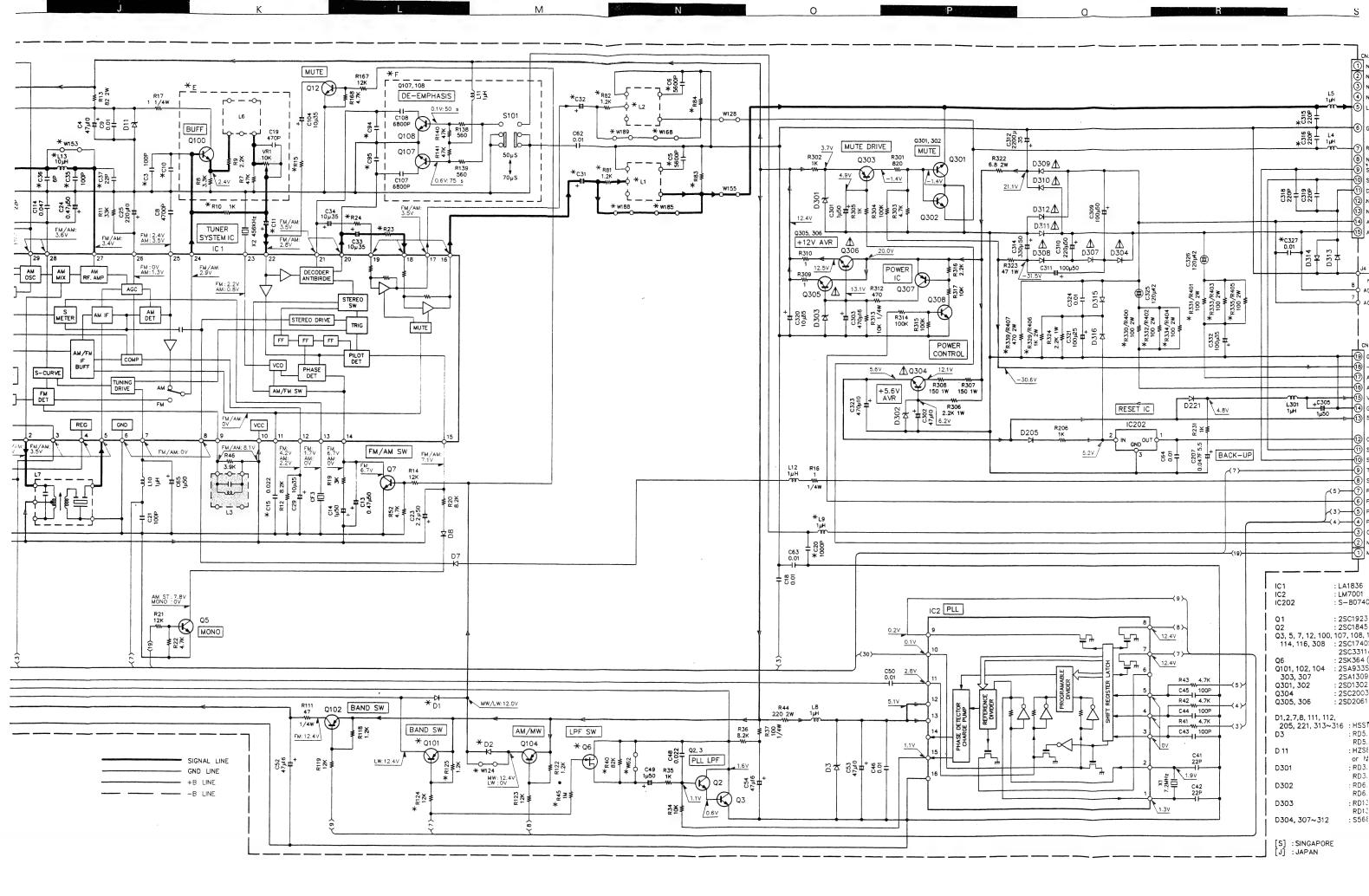
MODEL		DESTINATION							~																				
NAME	PRODUCT.P.	COUNTRY ABB.	INIT NAME A,	B C~E	F	R2	R10 R15	R23,24	R30~33,40,45, 81,82,117,124,125	R83,84	R329~335,	R400~407	C3,15,	C5,6, 36,37	C10	C11	C20	C31,32	000	00105	C315,316,		1	_			T .		
	JAPAN MADE	GENERAL MARKET M X05	5-4490-22 YE	S NO	YES	3 3K	VES 47K	6.8K	NO.		339			-	0.0	_	-		-		327	CF1,2	L1.2	L9	L13	L103	Q6,101,113, 114,116	D1,2	W62,124,153,168, 185,188,189
	ON AN MADE		5-4490-72 YE						NO	39K	YES	NO	¥ES.					0.47µ 50				L72-0531-05	NO	YES	W153	139-1328-05		NO	
T-58	SINGAPORE	PX	5-4490-21 YE						NO	39K	YES	NO	YES	NO	1200P	2.2µ50	NO	0.47µ50	YES	0.018		L72-0531-05							YES
1	MADE									39K	NO	YES	YES					0.47µ 50				L71-0531-05	NO	VES	W153	130 1700 05		NO	YES
	MALAYSIA MADE		5-4490-71 YE 5-4490-21 YE	SINO	YES	3.3K	YES 47K	6.8K	NO	39K	NO	YES	YES	NO	1200P	2.2 450	NO	0.47µ50	YES	0.018	NO							NO	YES
	JAPAN MADE	EUROPE			100	J.J.	163 7/1	U.OK	NO	39K	NO	YES	YES	NO	1200P	2.2µ50	YES	0.47µ50	YES	0.022	NO	L72-0531-05 L72-0531-05	NO	YES	W153	L39-1328-05	NO	NO	YES
T-58L		GERMANY G	5-4492-71	VES	NO	,,	NO 10K	1.2K	VE0		YES	NO												1		103-1020-03	NO	NO	YES
	SINGAPORE/ MALAYSIA MADE	EUROPE E U.K. T GERMANY G	5-4492-70	J IES	NO	"	NO TOK	1.2K	YES	4.7K	NO	YES	NO	YES	1000P	1µ50	NO	2.2µ50	NO	0.027	YES	L72-0536-05	YES	NO	YES	L39-1325-05	YES	YES	NO
														L						- 1			1	1	!	I		- 1	1

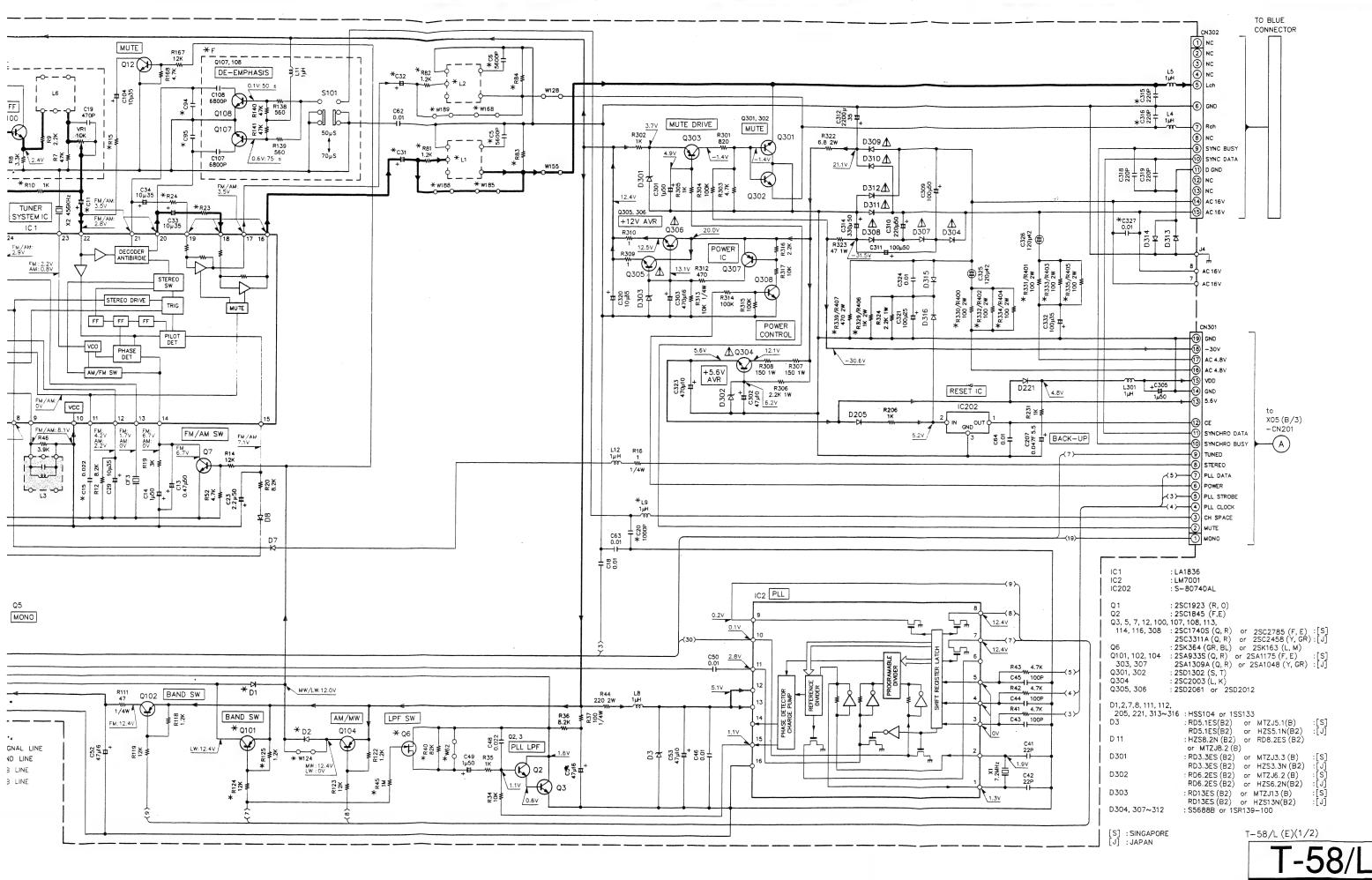
CAUTION

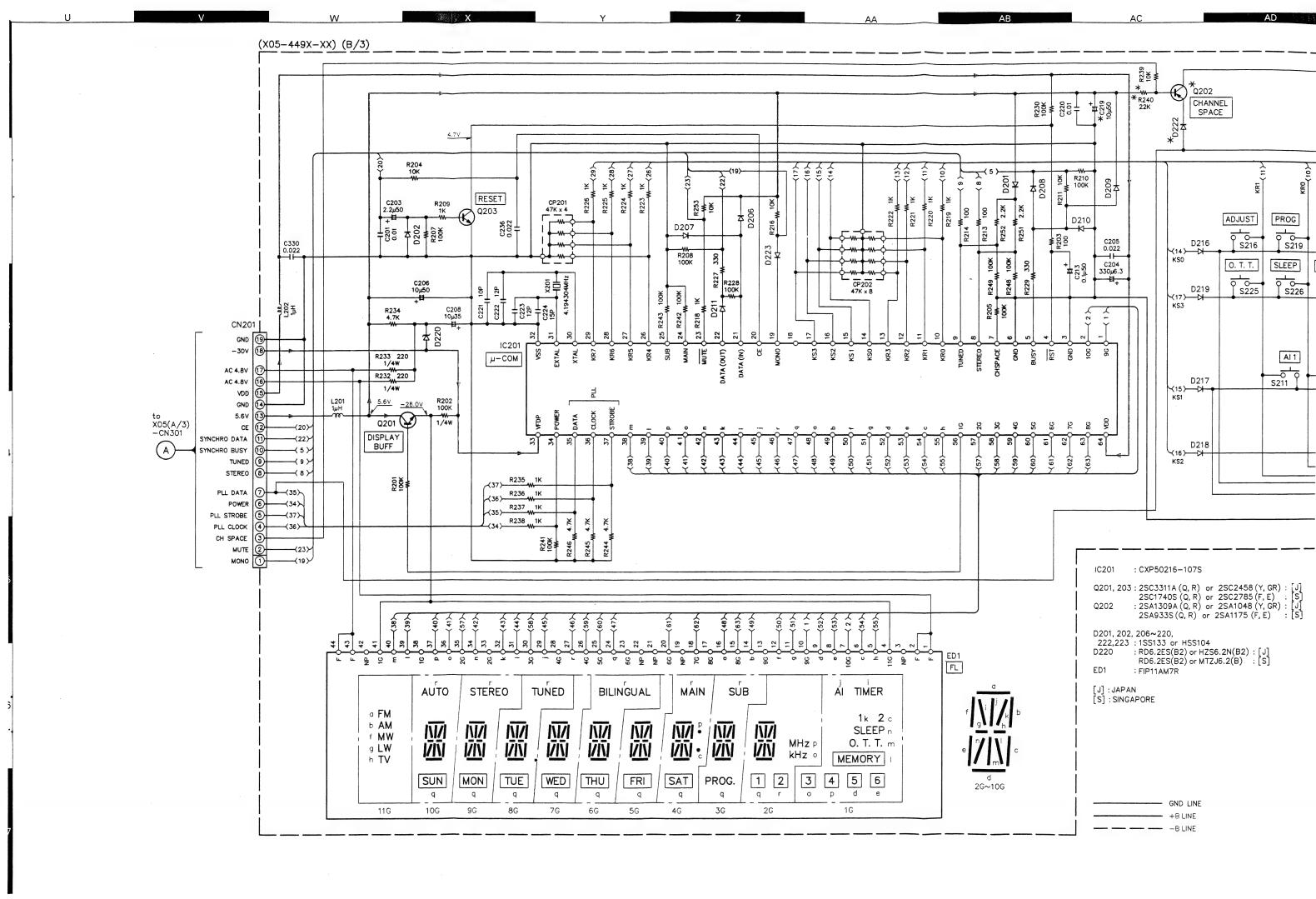
Expression Annual Safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

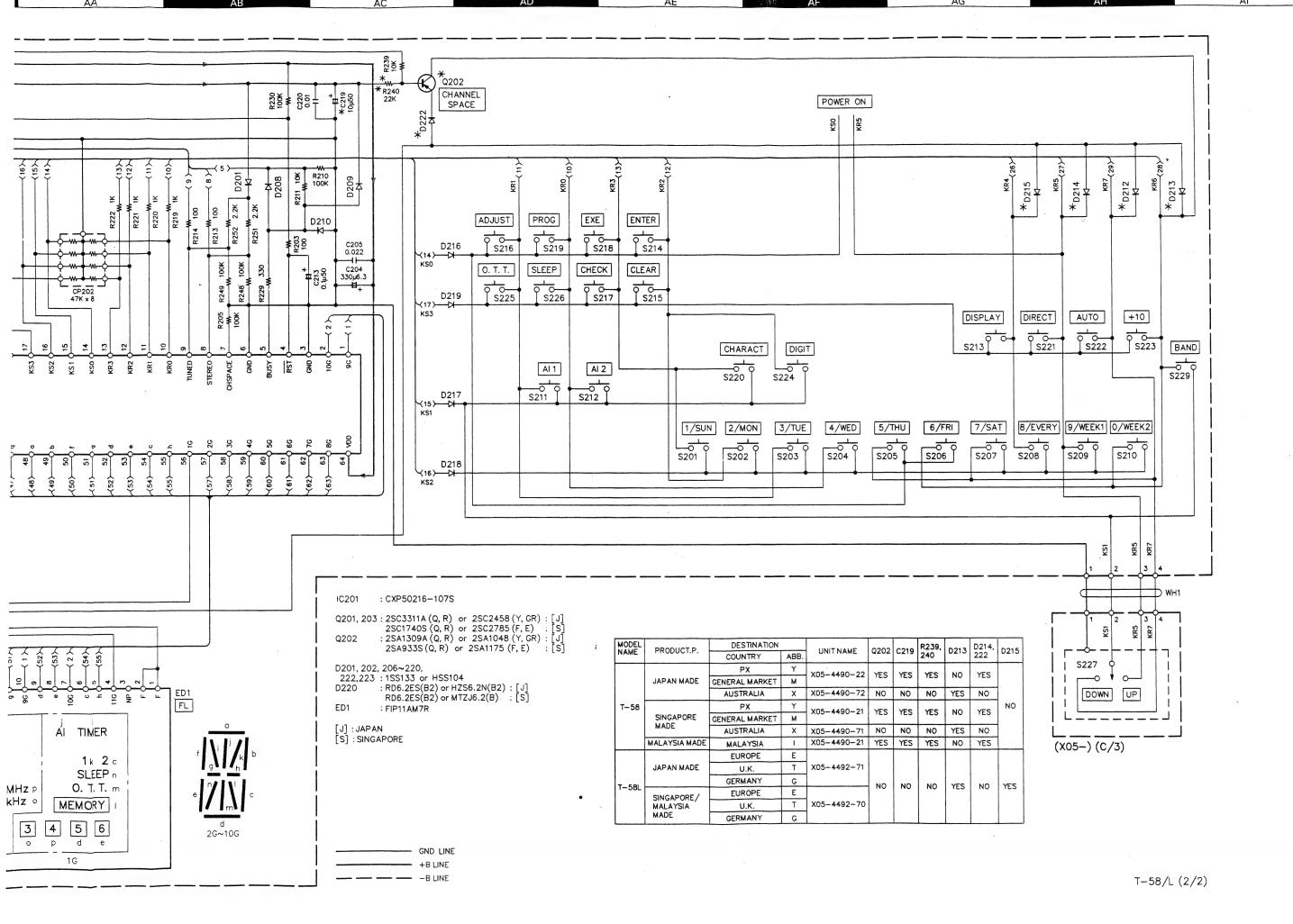
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter during reception of an FM broadcast signal (with a signal strength of 60dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and at the ANT terminal).

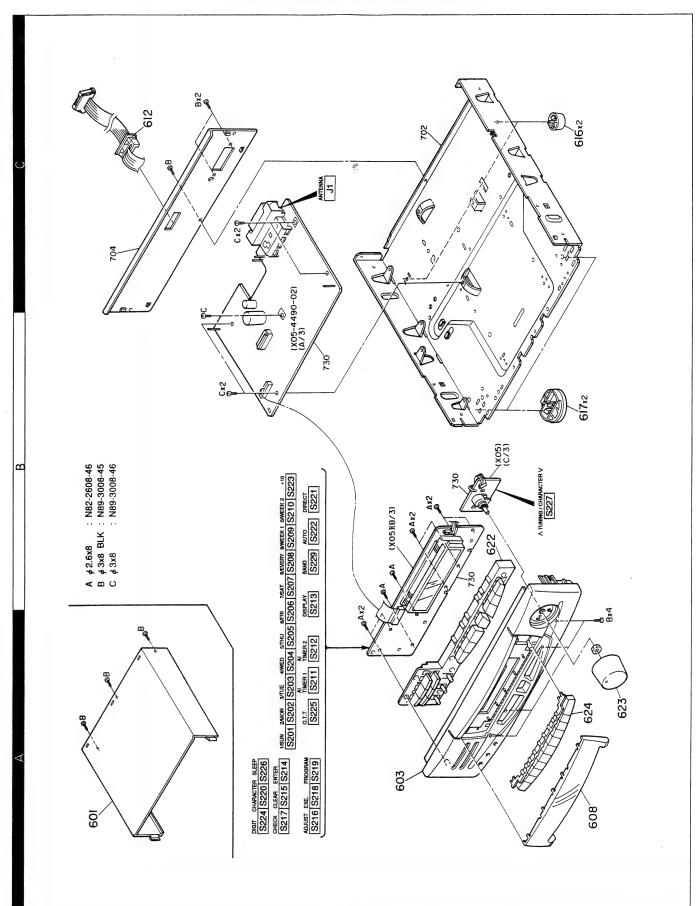




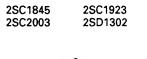




EXPLODED VIEW (UNIT)



Parts with the exploded numbers larger than 700 are not supplied.







2SA1175 , 2SC2785

2SC1845

LM7001



2SA933S



2SA1048 2SC1740S 2SC2458 2SK163 2SK364





2SD2061

LA1836





2SA1309A 2SC3311A

S-80740AL





For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ Indicates safety critical components.

To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter during reception of an FM broadcast signal (with a signal strength of 60dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of an AM broadcast signal (with a signal strength of 60dB at the ANT terminal).

× New Parts

PARTS LIST

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref	. No.	Addres	-	1	arts	No.	Description	Desti-	Ře-
参用	照番号	位 置	Par	1	밂	番号	部品名/規格	nation	marks
						T-58/L :	JAPAN MADE		
601		1 A	T	A01-17			METALLIC CABINET	T	I
603 603		2A 2A	*	A60-06			PANEL PANEL	YMX ETG	
608		2A	*	B10-20			FRONT GLASS		
-				B46-00 B46-00	95-	03	WARRANTY CARD WARRANTY CARD	Y	
-				B46-00 B46-03			WARRANTY CARD WARRANTY CARD	X ETG	
612		1 C	*	E30-27	77-	05	CORD WITH CONNECTOR		
-			*	H10-58			POLYSTYRENE FOAMED FIXTURE (L)		
-			1	H10-58	32-	04	POLYSTYRENE FOAMED FIXTURE (R) PROTECTION BAG (235X350X0.03)	Y	
-			*	H25-03 H50-11			PROTECTION BAG (800X400X0.03) ITEM CARTON CASE	YMX	
-			*	H50-11	33-	04	ITEM CARTON CASE	ETG	
616 617		2C 2B		J02-03 J02-10			FOOT REAR FOOT FRONT		
622 623		2B 2A	*	K29-59 K29-59			KNOB KNOB TUNING/CHARACTER		
624		2A	*	K29-59	82-	03	KNOB WEEK/+10		
A B C		2A,2B 1A,1C		N82-26 N89-30	08-	45	BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW		
C		1B,1C	1	N89-30			PORE, MALAYSIA MADE		
601		1 A	Г	A01-18			METALLIC CABINET	Т	-
603 603		2A 2A	*	A60-06			PANEL PANEL	YMXI ETG(SW	
608		2A	*	B10-20: B46-00			FRONT GLASS WARRANTY CARD	(SW	
-				B46-009	95-0	03	WARRANTY CARD	Y	
-				B46-009 B46-03			WARRANTY CARD WARRANTY CARD	X ETG	
-				B46-031	10-0)3	WARRANTY CARD	ETG(W	
612		1 C	*	E30-277	77-0)5	CORD WITH CONNECTOR	(SW	
- -				H10-585		2	POLYSTYRENE FOAMED FIXTURE (L)	EYMXTG	ı
-			*	H10-586	51-C)2	POLYSTYRENE FOAMED FIXTURE (R) POLYSTYRENE FOAMED FIXTURE (L)	EYMXTG IETG(W	
-				H10-586 H25-023			POLYSTYRENE FOAMED FIXTURE (R) PROTECTION BAG (235X350X0.03)	IETG(W	
-				H25-038		: 1	PROTECTION BAG (800X400X0.03)	(SW	
-			*	H50-121 H50-121	3-0	4	ITEM CARTON CASE	ETG YX	
_				H50-121			ITEM CARTON CASE ITEM CARTON CASE	M (W	
_			*	H50-122	4-0	4	ITEM CARTON CASE	ETG(W	
616 617		2C 2B		J02-036 J02-104			FOOT REAR FOOT FRONT	(SW (SW	
								. 5 "	

L: Scandinavia

Y: AAFES (Europe)

K: USA Y: PX (Far East, Hawaii) T: England X : Australia

P: Canada E: Europe

M: Other Areas

R: Mexico G: Germany S : SINGAPORE MADE W : MALAYSIA MADE

★ indicates safety critical components.

T-58/L

* New Parts

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Ref. No.	Address	1	Parts No.	Description	Desti- Re-
参照番号	/1. 200	Parts 新	部品番号	部品名/規格	nation marks 仕 向 備考
622 623 624	2A ×	*	K29-5949-02 K29-5950-14 K29-5982-03	KNOB KNOB TUNING/CHARACTER KNOB WEEK/+10	(SW (SW (SW
A B C	2A,2B 1A,1C 1B,1C		N82-2608-46 N89-3008-45 N89-3008-46	BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW	(SW (SW (SW
0.1	1			T (X05-449X-XX)	
C1 ,2 C3 C4 C5 ,6 C8	k	*	CK45FF1H103Z CC45FSL1H101J CE04KW1A470M CQ93FMG1H562J CK45FF1H472Z	CERAMIC 0.010UF Z CERAMIC 100PF J ELECTRØ 47UF 10WV MYLAR 5600PF J CERAMIC 4700PF Z	YMXI ETG
C9 C10 C10 C11 C11	*	*	CK45FF1H103Z CQ93FMG1H102J CQ93FMG1H122J CE04LW1H010M CE04LW1H2R2M	CERAMIC 0.010UF Z MYLAR 1000PF J MYLAR 1200PF J ELECTRO 1.0UF 50WV ELECTRO 2.2UF 50WV	ETG YMXI ETG YMXI
C12 C13 C14 C15 C17			CE04KW1V100M CE04KW1HR47M CE04KW1H010M CK45FF1H223Z CK45FF1H473Z	ELECTRO 10UF 35WV ELECTRO 0.47UF 50WV ELECTRO 1.0UF 50WV CERAMIC 0.022UF Z CERAMIC 0.047UF Z	YMXI
C18 C19 C20 C21 C23			CK45FF1H103Z CK45FB1H471K CC45FSL1H102J CC45FSL1H101J CE04KW1H2R2M	CERAMIC 0.010UF Z CERAMIC 470PF K CERAMIC 1000PF J CERAMIC 100PF J ELECTRØ 2.2UF 50WV	ETG YMI
C24 C25 C26 C27 C28 ,29			CE04KW1HR47M CE04KW1A221M CC45FSL1H101J CK45FF1H473Z CE04KW1V100M	ELECTRO 0.47UF 50WV ELECTRO 220UF 10WV CERAMIC 100PF J CERAMIC 0.047UF Z ELECTRO 10UF 35WV	
C31 ,32 C31 ,32 C33 ,34 C35 C36			CE04LW1HR47M CE04LW1H2R2M CE04KW1V100M CC45FSL1H101J CC45FSL1H060D	ELECTRO 0.47UF 50WV ELECTRO 2.2UF 50WV ELECTRO 10UF 35WV CERAMIC 100PF J CERAMIC 6.0PF D	YMXI ETG YMXI ETG
C37 C41 ,42 C43 -45 C46 C48			CC45FCH1H220J CC45FCH1H220J CC45FSL1H101J CK45FF1H103Z CQ93FMG1H223J	CERAMIC 22PF J CERAMIC 22PF J CERAMIC 100PF J CERAMIC 0.010UF Z MYLAR 0.022UF J	ETG
C49 C50 C51 C52 C53			CE04KW1H010M CK45FF1H103Z CE04KW1H010M CE04KW1C470M CE04KW1A470M	ELECTRO 1.0UF 50WV CERAMIC 0.010UF Z ELECTRO 1.0UF 50WV ELECTRO 47UF 16WV ELECTRO 47UF 10WV	
C54 C57 C60 C61 C62 -64			CE04KW1C470M CC45FCH1H220J CK45FF1H103Z C91-0745-05 CK45FF1H103Z	ELECTRØ 47UF 16WV CERAMIC 22PF J CERAMIC 0.010UF Z CERAMIC 100PF K CERAMIC 0.010UF Z	YMXI
C65 C94 ,95	*	- 1	CE04KW1H010M CQ93FMG1H183J	ELECTRØ 1.0UF 50WV MYLAR 0.018UF J	x

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参照番号	位置	Parts 新	部品番号	部品	名/規	格	仕 向	備老
094 ,95 094 ,95 0104 0107,108		*	CQ93FMG1H223J CQ93FMG1H273J CE04KW1V100M CQ93FMG1H682J CK45FF1H473Z	MYLAR ELECTRO MYLAR	0.022UF 0.027UF 10UF 6800PF 0.047UF	J J 35WV J Z	YMI ETG YMI	
0182 0183 0201 0203 0204			CC45FSL1H150J CK45FF1H473Z C91-0769-05 C90-3254-05 C90-3216-05	CERAMIC CERAMIC ELECTRO	15PF 0.047UF 0.01UF 2.2UF 330UF	J Z K 50WV 6.3WV		
0205 0206 0207 0208 0213			C91-0085-05 C90-3258-05 C90-1827-05 C90-3244-05 C90-3248-05	ELECTRO ELECTRO ELECTRO	0.022UF 10UF 0.047UF 10UF 0.1UF	N 50WV 5.5WV 35WV 50WV		
C219 C220 C221 C222,223 C224		*	C90-3258-05 C91-0769-05 C91-1235-05 C91-1237-05 C91-1239-05	CERAMIC CERAMIC CERAMIC	10UF 0.01UF 10PF 12PF 15PF	50WV K J J	YMI	
C236 C301 C302 C303 C305			C91-0085-05 CE04KW1H010M CE04KW1A470M CE04DW1C471M CE04KW1H010M	ELECTRO ELECTRO	0.022UF 1.0UF 47UF 470UF 1.0UF	N 50WV 10WV 16WV 50WV		
C309 C310 C311 C312 C314			CE04KW1H101M CE04KW1H221M CE04KW1H101M CE04KW1V222M CE04KW1H331M	ELECTRO ELECTRO ELECTRO ELECTRO ELECTRO	100UF 220UF 100UF 2200UF 330UF	50WV 50WV 50WV 35WV 50WV		
C315,316 C318,319 C320 C321 C323			CC45FSL1H221J CC45FSL1H221J CE04KW1V100M CE04KW1E101M CE04KW1A471M	CERAMIC CERAMIC ELECTRO ELECTRO ELECTRO	220PF 220PF 10UF 100UF 470UF	J J 35WV 25WV 10WV	ETG	
C324 C325,326 C327 C330 C332			CK45FF1H103Z C90-1839-05 CK45FF1H103Z C91-0085-05 CE04KW1V101M	CERAMIC NP-ELEC CERAMIC CERAMIC ELECTRO	0.010UF 120UF 0.010UF 0.022UF 100UF	Z 42WV Z N 35WV	ETG	
J1 J1	1C 1C		E20-0321-05 E20-0476-05	LOCK TERMINAL	BOARD BOARD(4	1P)	ETG YMXI	
J6			J11-0098-05	WIRE CLAMPER				
CF1 ,2 CF1 ,2 CF3 L1 ,2 L3		* *	L72-0531-05 L72-0536-05 L72-0581-05 L79-1219-05 L30-0910-05	CERAMIC FILTE CERAMIC FILTE CERAMIC FILTE LC FILTER FM IFT	R		YMXI ETG ETG	
L4 ,5 L6 L7 L8 L9		*	L40-1091-17 L79-1220-05 L30-0488-05 L40-1091-17 L40-1091-17	SMALL FIXED I LC FILTER AM IFT SMALL FIXED I SMALL FIXED I	NDUCTOR	(1UH)	ETG	

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参照番号	位 置	新	部品番号	郡 品 名 / 規 格		備考
L10 L11 L12 L13 L103			L40-1091-17 L40-1091-17 L40-1091-17 L40-1001-17 L39-1325-05	SMALL FIXED INDUCTOR(1UH) SMALL FIXED INDUCTOR(1UH) SMALL FIXED INDUCTOR(1UH) SMALL FIXED INDUCTOR(10UH) COMBINATION COIL	YMI ETG ETG	
L103 L108 L201,202 L301 X1			L39-1328-05 L40-1091-17 L40-1091-17 L40-1091-17 L77-1122-05	COMBINATION COIL SMALL FIXED INDUCTOR(1UH) SMALL FIXED INDUCTOR(1UH) SMALL FIXED INDUCTOR(1UH) CRYSTAL RESONATOR(7.2MHz)	YMXI	
X2 X201			L78-0295-05 L77-1175-05*	RESONATOR (456kHz) CRYSTAL RESONATOR(4.194304MHz)		
CP201 CP202 R13 R37 R44			R90-0487-05 R90-0804-05 RS14KB3D820J RD14NB2E101J RS14KB3D221J	MULTI-COMP 47KX4 J 1/6W MULTI-COMP 47KX8 J 1/4W FL-PROOF RS 82 J 2W RD 100 J 1/4W FL-PROOF RS 220 J 2W		
R111 R306 R307,308 R313 R322			RD14NB2E470J RS14DB3A222J RS14DB3A151J RD14NB2E103J RS14KB3D6R8J	RD 47 J 1/4W FL-PROOF RS 2.2K J 1W FL-PROOF RS 150 J 1W RD 10K J 1/4W FL-PROOF RS 6.8 J 2W		
R323 R324 R329 R330-335 R339			RS14DB3A470J RS14DB3A222J RS14DB3D102J RS14DB3D101J RS14DB3D471J	FL-PROOF RS 47 J 1W FL-PROOF RS 2.2K J 1W FL-PROOF RS 1.0K J 2W FL-PROOF RS 100 J 2W FL-PROOF RS 470 J 2W		J
R400-405 R406 R407 VR1			RS14KB3D101J RS14KB3D102J RS14KB3D471J R12-3685-05	FL-PROOF RS 100 J 2W FL-PROOF RS 1.0K J 2W FL-PROOF RS 470 J 2W TRIMMING POT.(10K)	ETG	ន្តន
S101 S201-226 S227 S229			S31-2132-05 S40-1064-05 S29-1156-05 S40-1064-05	SLIDE SWITCH DE-EMPHASIS PUSH SWITCH TUNING/CHARACTER ROTARY SWITCH BAND PUSH SWITCH	YMI	
D1 ,2 D1 ,2 D3 D3 D3			HSS104 1SS133 HZS5.1N(B2) MTZJ5.1(B) RD5.1ES(B2)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE	ETG ETG	JS
D7 ,8 D7 ,8 D11 D11 D11			HSS104 1SS133 HZS8.2N(B2) MTZJ8.2(B) RD8.2ES(B2)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE		JS
D111,112 D111,112 D201,202 D201,202 D205-212			HSS104 1SS133 HSS104 1SS133 HSS104	DIODE DIODE DIODE DIODE		
D205-212 D213 D213 D214			1SS133 HSS104 1SS133 HSS104	DIODE DIODE DIODE	EXTG EXTG YMI	

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5 (N.	Addre	ss New	Parts No.	Description		Re- marks
Ref. No. 参照番号		Parts 置新		部品名/規格	仕 向	備考
214 215 215 215 216-219 216-219			1SS133 HSS104 1SS133 HSS104 1SS133	DIODE DIODE DIODE DIODE DIODE	YMI ETG ETG	
0220 0220 0220 0221 0221			HZS6.2N(B2) MTZJ6.2(B) RD6.2ES(B2) HSS104 1SS133	ZENER DIODE ZENER DIODE ZENER DIODE DIODE DIODE		JS
0222 0222 0223 0223 0301			HSS104 1SS133 HSS104 1SS133 HZS3.3N(B2)	DIODE DIODE DIODE DIODE ZENER DIODE	YMI	J
D301 D301 D302 D302 D302		*	MTZJ3.3(B) RD3.3ES(B2) HZS6.2N(B2) MTZJ6.2(B) RD6.2ES(B2)	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		JS
D303 D303 D303 D304 D304			HZS13N(B2) MTZJ13(B) RD13ES(B2) S5686B 1SR139-100	ZENER DIODE ZENER DIODE ZENER DIODE DIODE DIODE DIODE		J
D307-312 D307-312 D313-316 D313-316 ED1			S5688B 1SR139-100 HSS104 1SS133 FIP11AM7R	DIODE DIODE DIODE DIODE DIODE INDICATOR TUBE		
IC1 IC2 IC201 IC202 Q1		*	LA1836 LM7001 CXP50216-107S S-80740AL 2SC1923(R,0)	ANALOGUE IC IC(PLL FREQUENCY SYNTHESIZER) IC(U-COM) IC(VOLTAGE DETECTOR) TRANSISTOR		
Q2 Q3 Q3 Q3 Q3			2SC1845(F,E) 2SC1740S(Q,R) 2SC2458(Y,GR) 2SC2785(F,E) 2SC3311A(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		01.101.1
Q5 Q5 Q5 Q5 Q6			2SC1740S(Q,R) 2SC2458(Y,GR) 2SC2785(F,E) 2SC3311A(Q,R) 2SK163(L,M)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR FET	ETG	
Q6 Q7 Q7 Q7			2SK364(GR,BL) 2SC1740S(Q,R) 2SC2458(Y,GR) 2SC2785(F,E) 2SC3311A(Q,R)	FET TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	ETG	
Q12 Q12 Q12 Q12 Q100			2SC1740S(Q,R) 2SC2458(Y,GR) 2SC2785(F,E) 2SC3311A(Q,R) 2SC1740S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	ETG	

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Ref. No.	Address	ew Par	ts No.		Descript	ion		Desti-	Re-
参照番号			番号	部	品名/	規格			mark 備考
Q100 Q100 Q100 Q101 Q101		2SC2458 2SC2785 2SC3311 2SA1048 2SA1175	(F,E) A(Q,R) (Y,GR)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR				ETG ETG ETG ETG	J S J J S
9101 9101 9102 9102 9102		2SA1309 2SA933S 2SA1048 2SA1175 2SA1309	(Q,R) (Y,GR) (F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR				ETG ETG	J S J S J
Q102 Q104 Q104 Q104 Q104		2SA933S 2SA1048 2SA1175 2SA1309 2SA933S	(Y,GR) (F,E) A(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR					SISIS
Q107,108 Q107,108 Q107,108 Q107,108 Q113,114		2SC1740 2SC2458 2SC2785 2SC3311 2SC1740	(Y,GR) (F,E) A(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR			,	YMI YM YMI YM ETG	81818
Q113,114 Q113,114 Q113,114 Q116 Q116		2SC2458 2SC2785 2SC33111 2SC17409 2SC2458	(F,E) A(Q,R) S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR				ETG ETG ETG ETG ETG	J S J S J
Q116 Q116 Q201 Q201 Q201		2SC2785 2SC33111 2SC17409 2SC2458 2SC2785	A(Q,R) S(Q,R) (Y,GR)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR				ETG ETG	SJSJS
9201 9202 9202 9202 9202		2SC33111 2SA1048 2SA1175 2SA13094 2SA933S	(Y,GR) (F,E) A(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR				YM YMI YM YM	J J S J S
9203 9203 9203 9203 9301,302		2SC1740S 2SC24586 2SC27856 2SC33114 2SD13026	(Y,GR) (F,E) A(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR					S J S J
9303 9303 9303 9303 9304		2SA10486 2SA11756 2SA1309A 2SA933S6 2SC20036	F,E) (Q,R) (Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR					J S J S
Q305,306 Q305,306 Q307 Q307 Q307		2SD2012 2SD2061 2SA10486 2SA11756 2SA1309A	F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR					JSJ
2307 2308 2308 2308 2308		2SA933SC 2SC1740S 2SC2458C 2SC2785C 2SC3311A	(Q,R) Y,GR) F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR					00101

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DT1 DT1			W02-116 W02-116	6-	15 05	FM FRONT-END ASSY FM FRONT-END ASSY	ETG YMXI	
						*		

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PARTS LIST

CAPACITORS

 $\frac{\text{CC}}{1}$ $\frac{45}{2}$ $\frac{\text{TH}}{3}$ $\frac{1H}{4}$ $\frac{220}{5}$ $\frac{\text{J}}{6}$

1 = Type ... ceramic, electrolytic, etc.

4 = Voltage rating

2 = Shape ... round, square, ect.

5 = Value

3 = Temp. coefficient

6 = Tolerance



Capacitor value

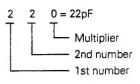
010 = 1pF

100 = 10pF

101 = 100pF

 $102 = 1000 pF = 0.001 \mu F$

 $103 = 0.01 \mu F$



• Temperature coefficient

1st Word	С	L	Р	R	S	T	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
ppm/°C	0	-80	-150	-220	-330	-4 70	-750

2nd Word G H J K L ppm/°C ± 30 ± 60 ± 120 ± 250 ± 500 Example : CC45TH = -470 ± 60 ppm/°C

• Tolerance (More than 10pF)

Code	С	D	G	J	K	М	Х	Z	Р	No code
(%)	±0.25	±0.5	±2	±5	±10	±20	+40	+80	+100	More than $10\mu\text{F} - 10 \sim +50$
							-20	-20	-0	Less than $4.7\mu F - 10 \sim +75$

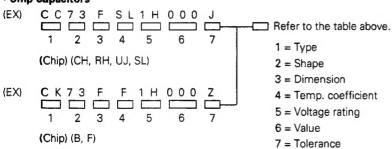
(Less than 10pF)

Code	В	С	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	±2

Voltage rating

2nd word	Α	В	С	D	E	F	G	Н	J	K	٧
1st word											
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	-
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	-
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	-

· Chip capacitors



Dimension (Chip capacitors)

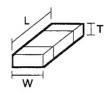
Dimension code	L	W	Т
Empty	5.6 ± 0.5	5.0 ± 0.5	Less than 2.0
Α	4.5 ± 0.5	3.2 ± 0.4	Less than 2.0
В	4.5 ± 0.5	2.0 ± 0.3	Less than 2.0
С	4.5 ± 0.5	1.25 ± 0.2	Less than 1.25
D	3.2 ± 0.4	2.5 ± 0.3	Less than 1.5
E	3.2 ± 0.2	1.6 ± 0.2	Less than 1.25
F	2.0 ± 0.3	1.25 ± 0.2	Less than 1.25
G	1.6 ± 0.2	0.8 ± 0.2	Less than 1.0

RESISTORS

· Chip resistor (Carbon)



Dimension



Carbon resistor (Normal type)

(EX)		1 4	В	В			
	1	2	3	4	5	6	7

1 = Type

5 = Rating wattage

2 = Shape

6 = Value

3 = Dimension

7 = Tolerance

4 = Temp. coefficient

Dimension (Chip resistor)

Dimension code	L	W	T
E	3.2 ± 0.2	1.6 ± 0.2	1.0
F	2.0 ± 0.3	1.25 ± 0.2	1.0
G	1.6±0.2	0.8±0.2	0.5±0.1

Rating wattage

Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	ЗА	1W
2A	1/10W	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

SPECIFICATIONS

T-58	
FM tuner section	
Tuning frequency range	87.5MHz~108MHz
Sensitivity (MONO at 75Ω)	
50dB quieting sensitivity (at 75Ω)	, , , , , , , , , , , , , , , , , , ,
STEREO	31.6uV/41.2dB
Total harmonic distortion (at 1kHz, 65d	Bf input)
MONO	
STEREO	
Signal to noise ratio (at 1kHz, 65dBf inp	
MONO	
STEREO	
Stereo separation (at 1kHz)	
Selectivity (±400kHz)	
Frequency response (30Hz~15kHz)	
AM tuner section	
Tuning frequency range	
9kHz step	E21LU-, 1 602LU-
10kHz step	
Usable sensitivity	
Signal to noise ratio Total harmonic distortion	
Total narmonic distortion	
General	
Dimensions	W : 360mm (14-3/16")
	H : 90mm (3-9/16")
	D : 372mm (14-5/8")
Weight (net)	
	(J.JID)

T-58L
FM tuner section
Tuning frequency range87.5MHz~108MHz
Sensitivity (DIN at 75 Ω)
MONO
Total harmonic distortion (DIN at 1kHz, 65.2dBf input)
MONO
STEREO
Signal to noise ratio (DIN weighted at 1kHz, 65.2dBf input)
MONO
Stereo separation (DIN at 1kHz)
Selectivity (DIN±300kHz)
Frequency response (30Hz~15kHz)+0.5dB, -3.0dB
1 requestry response (50112~ 15K112)
MW tuner section
Tuning frequency range531kHz~1,602kHz
Usable sensitivity12μV/(500μV/m)
Signal to noise ratio48dB
Total harmonic distortion0.6%
LW tuner section
Tuning frequency range 153kHz~281kHz
Usable sensitivity
Signal to noise ratio45dB
Total harmonic distortion
General
DimensionsW: 360mm (14-3/16")
H : 90mm (3-9/16")
D : 372mm (14-5/8")
Weight (net)2.5kg (5.5lb)

Note: KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the General Market (M) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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